



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,132	10/27/2003	Yoshinori Ichishi	4041J-000797	3236

27572 7590 01/19/2007
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

FORD, JOHN K

ART UNIT	PAPER NUMBER
----------	--------------

3744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/694,132

Applicant(s)

ICHISHI ET AL.

Examiner

John K. Ford

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/11/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5, 12-16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-11, 17 & 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/11/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Applicant's response of October 11, 2006 has been carefully considered. Given the number of new limitations added to independent claim 1, further discussion of the previous rejections over prior art is deemed unnecessary. Applicant's new limitations have necessitated a new search and new rejections are presented below.

Applicant's election of the first species of page 10, line 15 - page 25, line 10 (without traverse) is again acknowledged. Applicant has identified claims 1, 2, 4, 6-11, 17 and 18 as readable on the elected species. The examiner disagrees as to the readability of claim 10 and these concerns are addressed in the 35 USC 112, second paragraph, rejections that follow.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner previously stated that claim 10 was "not descriptive of the elected species because the elected IR sensor of Figure 13 (see specification, page 17, lines 16-18) has no lens. Only nonelected species have the lens. Please amend claim 10 to be descriptive of the elected species." In response, counsel points to page 17, lines 20-

Art Unit: 3744

21, arguing that the permeable film 702 (which is shown as flat in Figure 13) "functions as a lens and a filter." The examiner does not see how this is possible given that the permeable film has no curvature to concentrate light rays as would a lens. Moreover, even if the permeable film (which is shown as flat in Figure 13) "functions as a lens and a filter", claim 10 recites the lens and filter as separate elements. As the examiner sees it a lens is a distinct structure and something that "functions as a lens", but is not a lens does not correspond to that claimed structure. Furthermore, if counsel's reading were adopted one would be forced to read these two separately claimed elements on the same disclosed structure (i.e. permeable film 702) or, alternatively, to have one disclosed structure be doubly included in claim 10 (i.e. once as permeable filter and again as a lens). The examiner maintains that the limitation, in so far as its descriptiveness of the elected species is strained and ambiguous. Either amend claim 10 to be descriptive of the elected species or designate non-elected (with possible, as counsel notes, rejoinder in the event of an allowed generic claim).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paranen et al (US 2002/0110178) and/or JP 2001-349786 in view of Kamiya et al (USP 6,659,358).

Paranen discloses in Figure 2 an IR sensor 60 above and remote from the rest of the climate control 50 (see claim 1 of Paranen). Incidentally, prior art Figure 1 of Paranen is strikingly similar to the prior art used in the previous rejections (i.e. JP 2001-347816 (Figure 5) or JP 2001-97019 (Figure 2) or USP 6,155,492 (Figures 2 or 3)). By separating the IR sensor from the HVAC control panel and moving it to the top of the instrument panel Paranen obtains a better measure of occupant temperature and, consequently, greater occupant comfort. See paragraphs 0011, 0014 and 0031, incorporated here by reference by way of explanation.

Similarly, Denso-assigned JP '786 discloses an IR sensor 20 in Figure 1 mounted essentially at the top portion of the instrument panel well above where the HVAC controls are mounted (which HVAC controls are deemed to be shown down low in JP '786, as disclosed to be conventional in Paranen paragraph 0011, but not explicitly discussed in the reference).

Finally Denso-assigned Kamiya in Figure 4 teaches an IR sensor 31 (near the roof) separate from and significantly above the HVAC control panel 3e of the HVAC system. Specifically relied upon is the explicit showing by Denso that the HVAC control panel 3e is mounted at a low location on the instrument panel and separate from the IR

sensor. Figure 5 of Kamiya shows the control panel 3e, in some detail, with its conventional temperature set point and air volume (fan) control switches, among others.

In view of the teachings of Figure 4 and 5 of Kamiya and paragraph 11 of Paranen, it would have been obvious to have installed the conventional HVAC control panel (such as shown at 3e in Figure 5 of Kamiya) into either Paranen or JP '786 at a location on the center console of the instrument panel significantly below and separate from the location of the IR sensor 60 of Paranen or the IR sensor 20 of JP '786. Such a separation from the HVAC control panel and relatively high location of the IR sensor on the instrument panel clearly improves occupant comfort by allowing the IR sensor to better sense occupant temperature, without visual interference from the occupant actuating the HVAC controls.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1, 2, 17 and 18 above, and further in view of Goupil Jr. et al (US 2003/0157881).

It has become increasingly commonplace to label portions of the dashboard with indicia to identify components that are in an unexpected location or would not readily be recognized by the operator. In the case of Goupil Jr. et al (US 2003/0157881), as disclosed in paragraph 0034, a label is used to enhance the presence of a structure not normally found on the dashboard (namely the air filter access port). In view of such a teaching, it would have been obvious to one of ordinary skill in the art to have added

Art Unit: 3744

such a label to the instrument panel of the prior art discussed above to indicate the location of the IR sensor to advantageously enhance awareness of the location of this component, analogous to the aforementioned air filter access port.

Claims 7, 8, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of USP 6,155,492 (Figures 2 or 3) and Lambert et al (USP 6,828,560, Figures 5, 8 or 10)

As shown above in at least USP 6,155,492, it is known to mount the infrared silicon filter 22 flush with the instrument panel of the air conditioning control system as clearly shown in Figure 2. No details of the sensor are shown.

To have used the sensor shown in any one of Figure 5, 8 or 10 of USP 6,828,560 in place of the upper instrument panel mounted IR sensor of the prior art discussed in relation to the rejection of claim 1, 2, 17 and 18 to increase the sensitivity of the IR device by using a truncated pyramid concentrator and advantageously prevent convective air effects would have been obvious to one of ordinary skill in the art. Flush mounting the silicon window of any of the sensors shown in any one of the Figure 5, 8 or 10 embodiments of USP 6,828,560 would have been obvious in view of the teaching of USP '492, Figure 2, to advantageously protect the delicate sensor from potential damage caused by the occupants of the vehicle.

Regarding claim 8, to have focused the sensor on the desired part of the human body to be sensed would have been obvious to one of ordinary skill in the art. A sensor

mounted relatively high on the dashboard would inevitably have the bottom surface projecting downwardly to some extent to view the lower part of the torso (see, for example, USP 5,531,377, Figure 2 showing a typical IR viewing field for the sensor shown in Figure 3. USP 5,531,377 forms no part of this rejection except to show conventional knowledge in the field. Also see the viewing field in Denso's JP 2001-347816, Figure 6, also forming no part of this rejection except to show conventionally known viewing fields).

Claim 4 is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

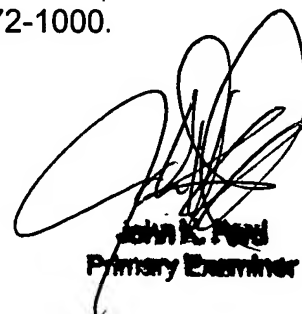
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John K. Ford
Primary Examiner